

Peculiarities and Uses of the Pillar Towers of the British Islands, by
DR. T. A. WISE.

[Received 25th March, 1864.]

So much has been written on the Pillar Towers of the British Islands, and so conflicting are the conclusions drawn, that it may be of use to direct the attention of members of the Asiatic Society, to these remarkable monuments of antiquity, in the expectation of obtaining more correct suggestions than have hitherto been made, regarding their use; as there is a growing belief that they are of Asiatic origin. In the course of the following remarks several examples of Indian Pillar Towers will be mentioned; and it is hoped that photography will afford aid to prove their relationship with those in Europe. Their number must necessarily be few, owing to the lapse of centuries, and to their having been generally destroyed by the persecuting Brahmans; and they will therefore only be found in distant and unfrequented places.

There are no records of the people who built these Towers, or the purposes for which they were built in Ireland and Scotland; and they are so ancient that the most general traditions among the people are that they were the work either of fairies, or the "good people," or "the weird people of the Beghts"; or of saintly old women; or of the Danes, the last conquerors, and cruel devastators of Ireland in ancient times. Without stopping to criticise such fancies, I shall confine myself to a general description of the peculiarities and uses of these remarkable structures, with a few remarks on the probable age in which they were built.

General description.—The graceful outline, and simple style and construction of the Pillar Towers, standing in the solitary waste, or rising unchanged amidst mouldering ruins of churches and tombstones, and their mysterious origin and uses, have long occupied attention, and afforded scope for the ingenuity of antiquarian speculators.

There are 118 of those Pillar Towers in Ireland, and two in Scotland; and they appear to have been constructed by powerful and intelligent missionaries, animated by religious zeal and a sense of security. Such an origin would explain their resemblance to each other, in their graceful form

and peculiar structure. They are from fifty to sixty feet in circumference, and eight or nine in diameter throughout, and are divided into from three to seven or twelve stages, forming apartments of different heights. Their floors are supported in some instances by ridges taken off the thickness of the walls, or by abutments or rests four or six inches in size. In the older Towers, holes are left for the reception of beams to support the floors.

Some of the Pillar Towers have holes in the lintel-stones to receive the hinges of the door. In other Towers the door appears to have been kept shut by a ladder resting upon the opposite wall, and against the closed door; in others again by a bar across the back of the door, the extremities resting in holes behind it, to keep it shut; which fact, with the depth of the floor below the door, prove that security was attended to. The different stages or apartments of the Pillar Towers were reached by a ladder drawn up from the elevated door, and from floor to floor as required, in times of danger. The entrance was from eight to twelve feet from the ground, was generally wider below than above, and flat, or rounded at the top. There were two kinds of windows; those near the top were generally four* in number turned to the cardinal points of the compass, and below these were small oblong openings at intervals, generally in opposite directions, to give light to the different stages of the Tower. Their size, position, and number, vary considerably in different Pillar Towers. The Towers are usually covered with a conical top, sometimes laid with horizontal, and in other cases by herring-bone masonry.

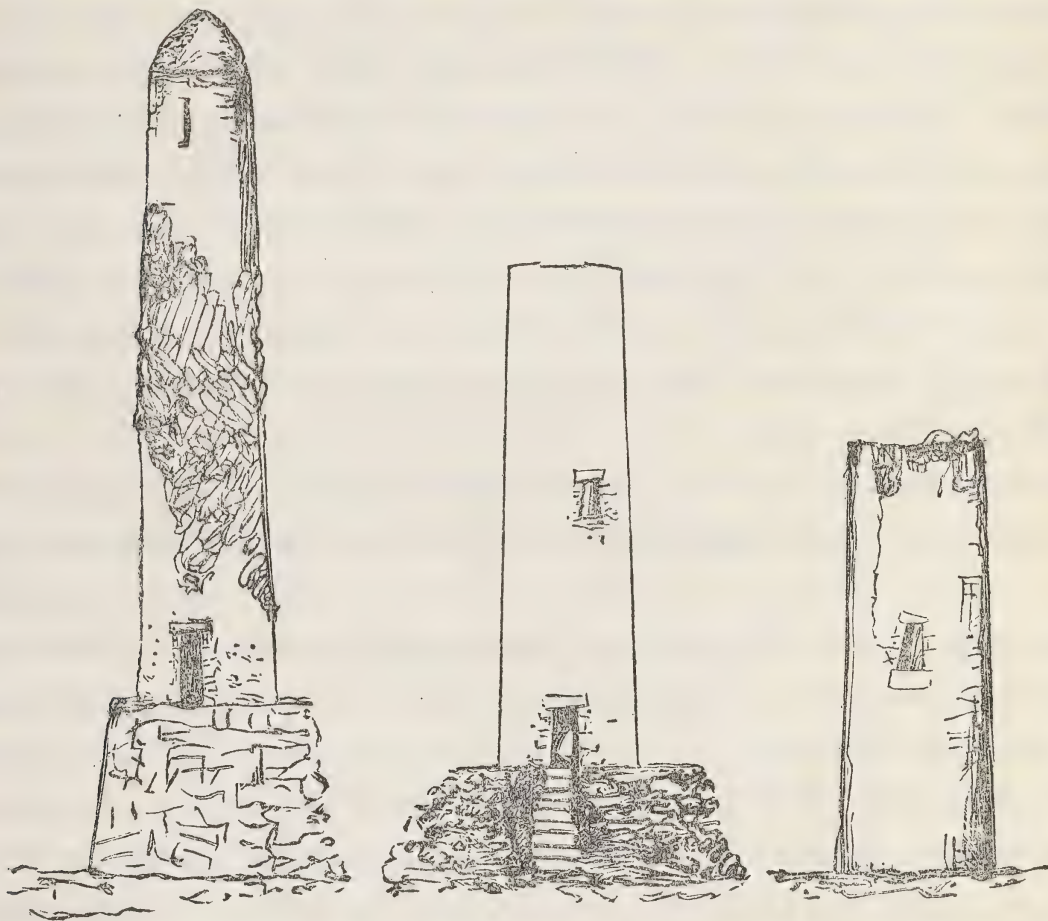
Neither the number of stories, nor the direction of the entrance or windows were of any material importance to the object of the building, as they varied so much in different Towers. The Towers generally resemble each other in the entrance being elevated seven, ten or thirteen feet above the surface of the ground; whereas the floor of the Towers is often three or four feet below the level of the door; and up to this elevation, the Tower is generally solid, sometimes with a projecting ridge of four inches, on the outside, level with the ground. The foundation descends two or three feet below the surface, except where the Tower is built on the solid rock.

* There are nine in the Pillar Tower of Clonmacnoise, and none in that of Dunnoughmore.

The stones of which the Pillar Towers are built were carefully and judiciously selected, and were often brought from a distance. They are fashioned into an oblong square form, accurately adjusted to each other, and embedded in a small quantity of shell lime,* the interior being common rubble work. The dressed stones are laid in horizontal layers, or in some cases in a somewhat spiral form, rising from the left to the right, in order apparently to add strength to the building.

The Pillar Towers were built by different races of mankind for various purposes; their construction extending over a period of several centuries, which fact will assist us in explaining many of their peculiarities. This has induced me to arrange them as Pagan or primitive, transition or Saxon, and Christian or Norman, which classification will be found more useful, than perhaps, strictly correct.

1. The Irish Pillar Towers of the primitive, early or simple form are few in number, and are more mutilated than the others owing to their age, to the stones having been selected with less care, and to



Clondalken near Dublin. Ross Camk near Galloway. Drumcliff near Sligo.†

* *Ulster Journal*, vol. I, p. 146.

† A road contractor tried the effects of gunpowder in reducing this venerable tower for road purposes.

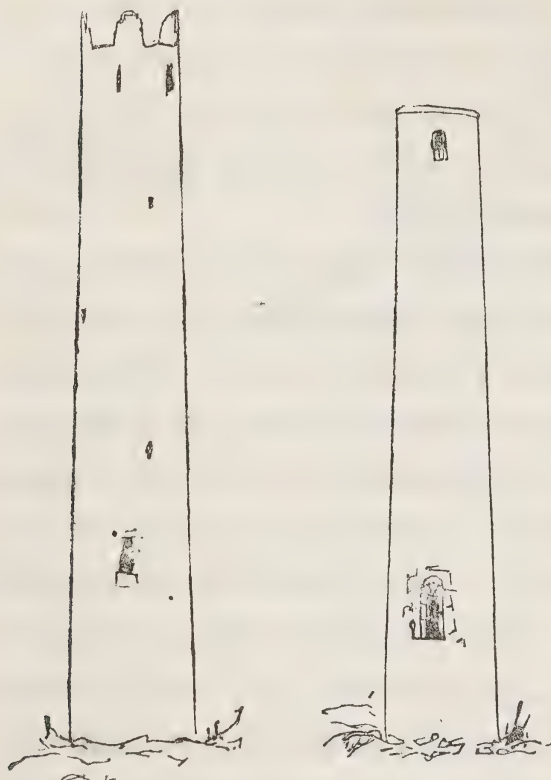
the dressing and arrangement not being so good as in the other classes. Like the early erect stones or obelisks of the North East of Scotland, they were numerous and were erected by Pagan workmen; but they underwent considerable changes as the people advanced in knowledge, social position and religious opinions.

These are examples of the primitive Pillar Towers, which appear to have been erected by Buddhists between the first and the fourth centuries, as is indicated by the sacred symbols of the sun or deity. They were unacquainted with the use of the arch. This is a strong indication of their Asiatic origin: for, amidst the most graceful and splendid remains of Buddhism in Asia, the absence of the arch is most striking. It was with the object of propagating their faith, that the Buddhist Missionaries visited Ireland; and at this early period they would find the country in a rude condition, and governed by numerous chieftains in constant collision with each other, while exposed to the inroads of seafaring robbers: not united enough to resist effectually, but too strong to submit to their tyranny. It was among these turbulent factions that the Buddhists first found it necessary to erect the Pillar Towers, both as a sacred emblem, and as the most simple and effectual means of obtaining personal security, as well as a safe deposit for the sacred relics and most precious effects of their religious worship.

The Chinese Travellers who visited India to study the Buddhist religion, and saw the use to which the Pillar Towers were put, enable us to explain the means employed to call the congregation to their devotions. This was done by the use of cymbals, horns, and drums; and this explains the use to which the brass trumpets were put, which are still sometimes found in the neighbourhood of the Pillar Towers in Ireland.

Besides the Pillar Towers figures of which are given, the following belong to this division: that of Luck in the county of Dublin; those of Tighado, Kildare; and Clones, Monaghan.

The Towers of the second class were constructed during the transition period, and were built by native artists as sacred monuments, and owing to their acquired power, with more care and skill than the primitive towers. This may explain the retention in general of the distinctive form of the earlier edifices, which were intended as safe places of retreat and defence.



Cloyne, Ireland. Abernethy, Scotland.

The Cloyne Pillar Tower may be instanced as an example of this class. The top of this graceful tower was injured by lightning, and a battlemented top was built upon it. The reddish coloured sandstone of which the tower is built, was obtained in the neighbourhood, and is still in excellent preservation. The curvature of the tower was worked with a chisel-pointed hammer. The stones are large and flat-bedded, and carefully worked into the form required. The thickness of the wall at the door is $3\frac{1}{2}$ feet, and the diameter is 9 feet 2 inches throughout. The door-way looks

SE by E. and is $11\frac{1}{2}$ feet from the ground. It is flat topped, being covered with a lintel, and is wider below than above. The tower has six stories; the first being on a level with the door, and the others resting upon ledges projecting from the wall; the height of these chambers is $11\frac{1}{2}$ feet. The four top windows face the cardinal points, and like the door, are broader below than above, in the Pelasgic and Egyptian style. Below, there are several small openings, one of which, over the door, is larger than the others, and has a marked modification of the arch.

Only two round Pillar Towers exist in Scotland. These have the same peculiar form and structure as those of Ireland, appear to have been built at the same early period, and afford good examples of the two varieties already described, while they are surrounded by the same mystery as to their uses.

The following description of the Abernethy tower is extracted from a previous essay of mine.

'Abernethy,* in Fifeshire, was the capital of one of the Pictish Governments; but the Pillar Tower which is situated there is not mentioned in any of our ancient histories. We only know that the people

* The name is derived from *aber* confluence, of the small stream Nethy, that passes down to the town and into the river Earn; and the town is sometimes still called by the Scoto-Irish name *Invernethy*.

were christianised, and the town and adjacent district were dedicated to God and Saint Bridget, in the fifth century (A.D. 456)*. It is probable, at this early period, that they followed the heathen custom of worshipping in the open air, (*sub dio*) at sacred stones; for we find in the eighth century (A.D. 711) that Nectan III., King of the Picts, being dissatisfied with the primitive custom of worship, and desirous to follow the Romish ritual, wrote to Ceolfred, Abbot of Jerron, in Northumberland, requesting information regarding certain disputed observances, and asking for architects to build a church, which was to be dedicated to St. Peter, the Prince of the apostles.† The architects were accordingly sent, and the church was built of stone, like that of the Romish church. This has passed away; new churches, and a collegiate establishment formed by the Culdees, and a priory, established in 1273, have disappeared: since then, another very old church has been taken down, and in the beginning of this century, another was built rather remarkable for its superior style of architecture. During these changes, extending over a long period, the Pillar Tower has stood, and is still distinguished by its form, and by the admirable manner in which the material was selected and the building executed.

‘The Abernethy Tower stands on a sloping bank, at a short distance from the Ochill hills, and a mile south of the river Tay, near where it joins the Earn. The view from the tower is contracted towards the south by the proximity of the hills, where a beautiful valley stretches southwards; while to the north, there is an extensive prospect of a rich and undulating country, the granary of Scotland, towards which direction the entrance of the tower looks. The building is 75 feet in height, and 48 feet in circumference; and its extreme diameter at the top is 13 feet 9 inches, increasing to the bottom, where it is 15 feet 6 inches; the thickness of the wall at the top being 2 feet 9 inches, and at the bottom 3 feet 7½ inches. The tower is now without a roof, and the coping over the wall is probably modern. It is divided into five stages, each supported by stone abutments. The tower is built of sand-stone, which is now much disintegrated, except on the lower and western side, where there are twelve courses of grey freestone, little changed by exposure to the weather. The stones are all carefully dressed, convex on the exterior, tapering inwards, and concave on their inner

* Innes' *Critical Essays*, vol. 1, pp. 111, 122, 117.

† Bede, L. 5, c. 21.

surface, to give a circular form to the tower; and they are accurately adjusted in regular courses with but little lime or cement. The doorway is six feet above the base of the tower; but in consequence of the graveyard adjoining having become greatly elevated above the general surface of the soil, the door is now only two feet above the ground. It is 7 feet $9\frac{1}{2}$ inches high, 29 inches in width at the spring of the semi-circular arch, and $27\frac{1}{2}$ inches at the base. Four windows near the top of the tower face the cardinal points: they are 3 feet $10\frac{1}{2}$ inches in height, 1 foot $4\frac{1}{2}$ inches in width above, and 1 foot $6\frac{1}{2}$ inches below, and seem to differ from each other in their architectural form. Gordon, in his *Itinerary*, mentions, at the beginning of last century, that "each window is supported by two small pillars;" traces of which are still very evident in one or two of them. Those in the west window are entirely gone. Dr. Wilson supposes* the windows may be modern; but after a careful examination, on the spot, I have come to the conclusion that they were prepared at the same time as the rest of the tower. Besides the four windows, there are three small openings to give light.

'This tower was repaired thirty years ago, when seven human skulls were found within it, lying together. Some of them were of a dark colour, as if they had undergone some process of embalming. Along with these, several long bones were found, some of which had been so recently deposited that they had still their ligaments attached to them.† The tower stands about twenty yards to the SW. of the parish church, which is a modern structure. It is now used as a belfry, and the beadle informed me that it is "pretty well" adapted for this purpose. It also contains the village clock; and the ancient Joug, or pillory, is attached to it.

'The Pillar-Tower of Abernethy‡ is said to have been built by Nectan III., A. D. 720, in the capital of a Pictish kingdom. The Culdees afterwards had a college there; and in 1273 this was converted into a priory of regular Canons of the Augustine order.'

* *Prehistoric Annals*, p. 595.

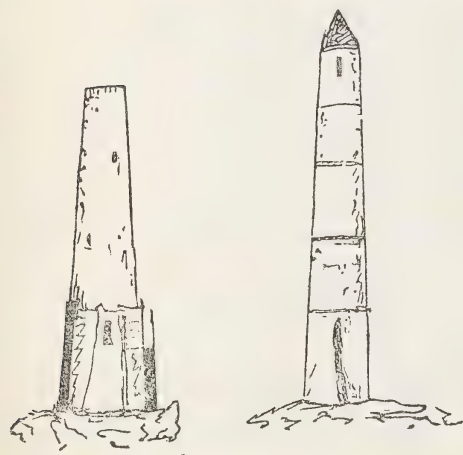
† Small's *Roman Antiquities of Fife*, p. 154, and Appendix F.

‡ The name which the Highlanders give to Abernethy is *Obair Neachtain*, or *Abair Neachtain*, i. e., "the work of Nectan." This Nectan or Nethan desired architects to be sent to build a church, [see Bede] perhaps that of Abernethy. "Fergusus episcopus Scotiæ Pictus,"—i. e., Fergus, the Pictish bishop of Ireland, was in the Roman general council, A. D. 721.—[a Binis, t. 3, quoted by Pinkerton, *Inquiry*, II., 267; see also *Statistical Account of Scotland*, vol. x., p. 435.

To this class belong the Pillar Towers of Agharullee Kilkenny; Kibrie, St. Carrice, Kilkenny; Cashel and Roscrea, Tipperary; Castle-dormor, Kilcallen, Kildare; Fertagh and Kelles, Meath; Swords, Dublin; Furlough, Killala and Meeleck, Mayo; Kilmallock, Limerick; Monasterboice, Louth; Rattoo, Clare; Seven churches, King's county; Keneith, Cork, and Seven churches, Wicklow.

The Pillar Towers being no longer strictly religious edifices, their original form was modified to suit the fancy of the architect and the prevailing style of the period. The graceful Pillar Tower of Ardmore, is built in square-coursed work of reddish sandstone. The courses vary in

thickness from 6 to 10 inches, and the inner face of the building is ordinary rubble-work walling. Its external circumference diminishes considerably with the height, and it has three sets-off externally, with weathered string courses, with sets-off internally. The door is 13 feet from the ground and semicircular at top, and diminishes in height and width internally; and



Keneith.

Ardmore.

the jambs widen below, with a three-inch torus round them, at their outer angle.

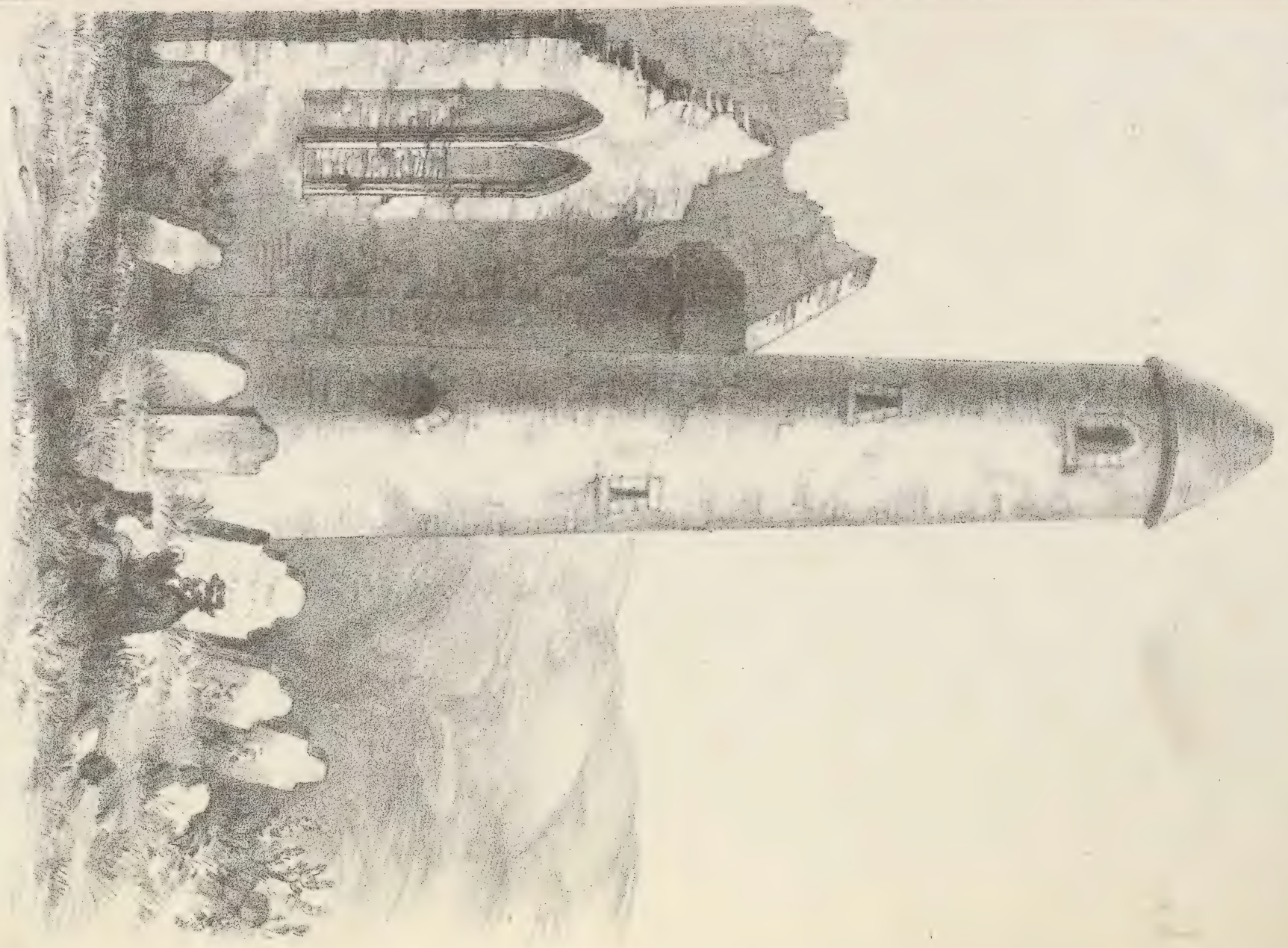
The Keneith Tower is built of the slate-stone of the locality; and is very peculiar in its external form, having a hexagonal base; each side of which is 10 feet 4 in. in width, and 20 feet in height. Including the round part, the tower is 50 feet 4 inches in height, and it appears to have been left unfinished; or else a portion of the original top has been destroyed. The Tower is built upon a levelled rock, cropping abruptly from the ground. The door faces the west, and is fourteen feet from the ground. The whole has undergone recent repair, and has been provided with iron stairs to the door, and to each of the four stories, which rest upon ledges left in the thickness of the wall; each compartment is 11 feet and 9 inches in height. The diameter of the Tower contracts as the wall rises; and the breadth of each ledge, four inches, increases the splaying of the wall. There is a small bell in the upper stage, supported by cross beams, but it appears to be unused. The walling of the foundation consists of large rough stones, and the

selection of the slate stones has been so good, that it is still in good preservation. The marks of the narrow, flat, and slightly concave chisel-hammer are still clean cut in the stone. The floor of this Tower is on a level with the door, and is supported by a flat arch with a well-hole in the centre, proving the advanced state of the arts at the time of its construction : a chamber is thus formed below the level of the door. The whole erection is admirably executed, and cemented with shell-lime, and the general effect is most graceful. This would be much more apparent, but for the ivy which covers the lower part and has already displaced some of the stones. If this ivy is not removed it will endanger the Tower.*

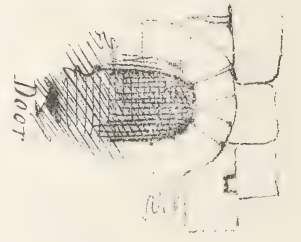
3. In the third, or Anglo-Saxon period, the Christian religion had been introduced into Ireland. It extends from the fifth or sixth to the end of the ninth century ; when the primitive churches were made of mud, and wattled as in Britain. As the influence of the priests increased, they absorbed much of the wealth of the country, and brought architects from the continent, whose constructive skill they employed in preparing the first stone edifices, while they enriched their altars with their most precious ornaments, to increase the splendour of their religious rites. This explains why these establishments were so frequently attacked by their unscrupulous neighbours, and the merciless Danish pirates. By the priests, the Pillar Towers of Ireland were found most valuable erections : near them they resided, and took refuge in them with their most valuable effects ; thus following the injunction of Pope Gregory to Augustine of Canterbury, in the sixth century, to adopt any thing good from the Pagan places of worship, for Christian purposes ; making such additions, as were necessary or convenient. They accordingly not only occupied such as already existed, but partially built some of these useful erections. These latter may be known by their more modern construction, and by their rounded doorways being cut into a series of recesses, the angles of which are slightly rounded off : also by the addition of a moulding, a mere incision upon the face and soffit of the arch. Other of these modern doorways are decorated with the chevron and bead ornament, as in the gold ornaments found in Irish bogs and in some very antique cinerary urns, dug up from old Pagan and Etruscan cairns and tumuli. In some of the Towers, the pediments, and the repeated columns, and successive arches and various mouldings of the doorway

* In the annals of Munster, still in MS., this Tower is said to have been built in 1015, soon after the battle of Clantarff.

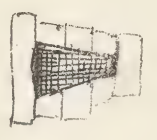




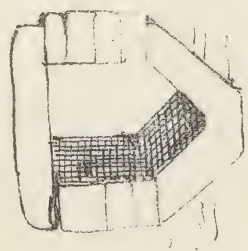
Pillar Tower of Cashel.



Door



Lower window



Upper window

become rich and striking; the latter narrowing as they recede into the wall. The capitals of some of the columns are heads, the hair of which is entwined with snake-like animals; as in the Timahoe, and Kildare, the ornaments of which resemble the rich and elaborate decorations on Cormac's chapel Cashel, executed towards the end of the ninth century. It may be allowed that Norman builders executed these doorways, and decorated them with the ornaments and symbols of their religion, like



Donnaghmore.

McCarthy's church and Pillar
Tower, Clonmacnoise.

their churches and other buildings. As they were in the habit of working in sandstone, these ornamented entrances in the Pillar Towers were usually of this stone. So much was this prized, and so marked is the contrast between the entrance and the Tower, that the former is supposed by that able architect, Mr. R. B. Brush, to have been subsequently inserted.

The Donnaghmore Pillar Tower has the ruins of a church and belfry close to it. This having been more modern, and being used as a place of retreat, has the door elevated, and is without the four upper windows. A crucifixion is over the door (page 564,) of this Tower.

McCarthy's church in the N. W. side of the cemetery of Clonmacnoise, is interesting from its having a Pillar Tower built at the same time, of the same stone, and similar in the character of the masonry. Part of the solidity of the Tower was sacrificed to give full

space to the chaste specimen of the Saxon chancel arch attached to it. This Tower is 55 feet in height, and 7 feet in diameter, and is built with lime. The conical cap is built in the herring-bone style. The door is on a level with the ground, and there are only two small windows near the top, looking to the north and south.

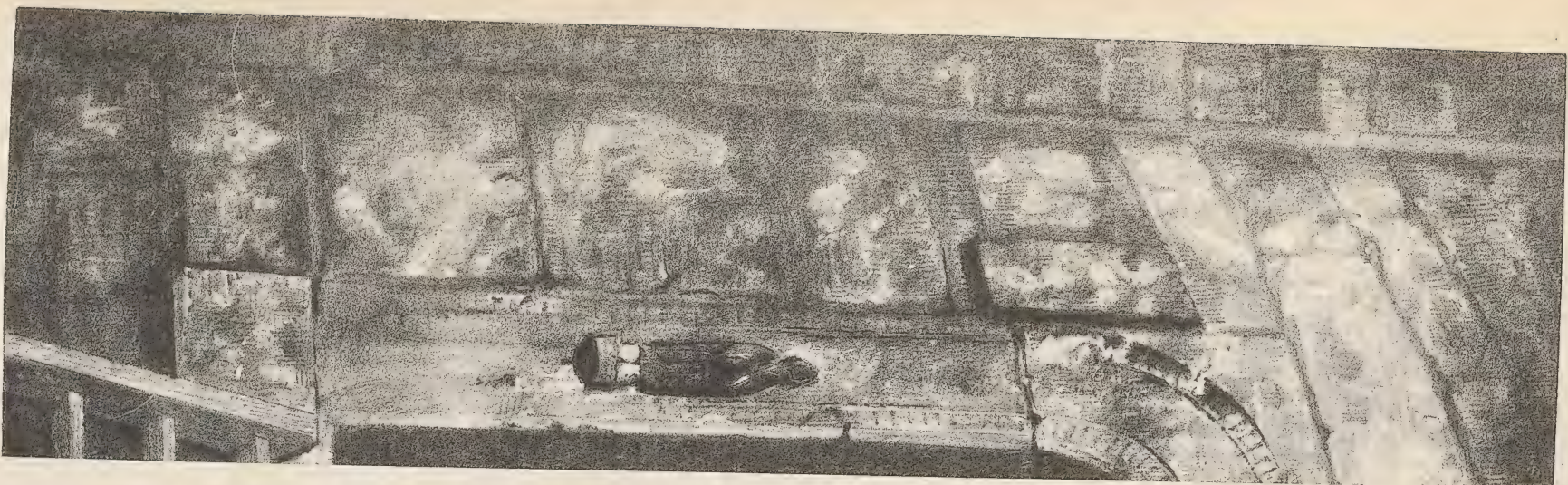
Another Pillar Tower of this class is that of Brechin* in Scotland, and is distinguished for the beauty of the workmanship, and the elegance of its form. It is supposed to have been built in the ninth century; or a century or more earlier than the old church of Brechin, which is supposed to have been founded by Kenneth IV. A. D. 990.† The present church, to which the tower is attached, was added long afterwards.

The Tower of Brechin is built on a gentle elevation, to the north of the old Castle of Brechin, and of the river Esk. It has a contracted view of a fruitful valley on the west; while on the east there is a rich and wide plain, terminating with the Bay of Montrose and the German Ocean.

The stones of which this tower is built have been carefully selected, and formed into square shapes, so modified as to give the circular form to the building; and they are so placed and fitted to each other, for 20 feet from below upwards, and in patches particularly on the east side, as to give a *spiral rising* to the tiers or courses, thus throwing the pressure of the superincumbent mass upon an inclined plane. I am not aware that this remarkable circumstance has ever been observed before; nor does it occur in any of the Irish Round Towers existing. Very little cement had been employed in the building; but the nature of this cement cannot readily be ascertained, as the tower has been thoroughly repaired, and a modern octagon roof erected over it, with angular-headed windows at each of the abutments and spaces, to give it the same architectural character as the modern church, which it joins, and of which it forms the south-west corner. The old tower, previous to the repairs, was eighty-five feet in height: it is now increased by eighteen feet, the height of the new roof. Its extreme circumference at the top is 38 feet 6 inches, sloping outwards to the bottom, where it is 50 feet; the interior diameter at the top is 7 feet 8 inches, at the bottom, 8 feet; the thickness of the wall at the four

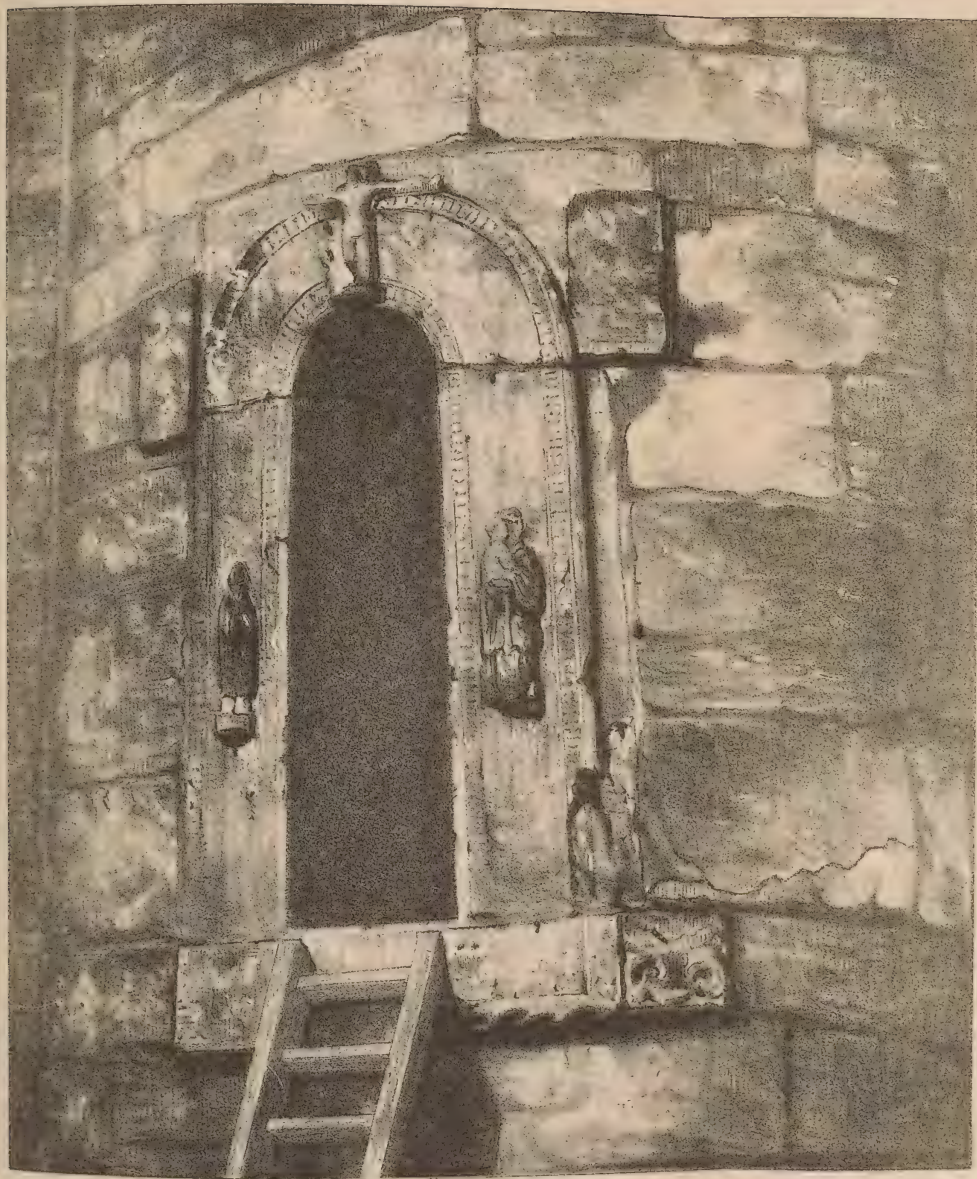
* From the Gaelic name Breachnain, a "brae," or sloping bank.

† Hic est qui tribuit magnam civitatem Brechne domino. Chr. Pict. Kenneth died by treachery (per dolum) A. D. 994. Ulster Annals.



Doorn

XVII



Engraved by H. M. Smith & Co. 1879

Doorway of Beechin Round Tower.



upper windows is 2 feet 10 inches, and at the doorway 4 feet, including the projection of the door-lintels, which is 2 inches.

There are seven openings in this tower. One of these is the doorway, which faces the west; and there are two oblong openings facing the south and east, to afford light to the interior; and four oblong rectangular windows, near the top, facing the cardinal points. Over all these openings are built large stones, and that over the door of the tower is scooped out, so as to give it an arched form. Those which surround the doorway are large blocks of sandstone, more prominent than the other stones of the building, and sculptured with bas-reliefs. That over the door is the crucifixion; and those on the lintels are the supposed figures of St. John and the Virgin Mary. At the side of the bottom of the doorway, are sculptured, on one side, a crouching animal, and on the other, a monstrous griffin;* and the lozenge ornament in the middle of the door-sill appears to have been filled with tracery. The double rows of button-like ornaments surrounding the doorway bear a resemblance to those upon the Inch-brayoc and Brechin sculptured pillar-stones.† All these figures and ornaments are now much defaced by time.‡ The other stones used in the building of the tower are grey-coloured freestone. Many years ago a second entrance was made, leading to the adjoining church, by removing a number of stones from the tower, which weakened it, and which perhaps accounts for "the large mass, in storms of wind, being seen to sway from side to side."§ There are six unequally sized stories, with platforms of wood, resting upon abutments or supports of hewn freestone, each of which projects from six to ten inches, and bears a strong timber floor. The top of the tower is reached by a series of six ladders. The only 'mason-marks' yet discovered in Pillar Towers are in the interior of this building, and have been delineated by Mr. Chalmers.|| They are often repeated, particularly about the middle, and are generally cut

* Perhaps symbolical of evil. See Eusebius' Life of Constantine, B. 3, ch. 3.

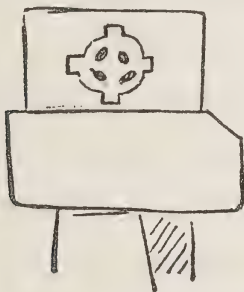
† See *Sculptured stones of Scotland* (Spalding Club,) plates 86 and 138.

‡ This opening was built up in 1847 by order of the Commissioners of Woods and Forests. I am indebted to the accurate Mr. Jervis for this and other particulars.

§ Black's *History of Brechin*, p. 259.

|| Mr. Chalmers, of Aldbar, was so kind as to allow me the use of a beautiful drawing of the doorway, which is here lithographed on a reduced scale, and which was intended to illustrate a posthumous work of his late able and lamented brother, prepared by the distinguished antiquary Cosmo Innes, Esq.

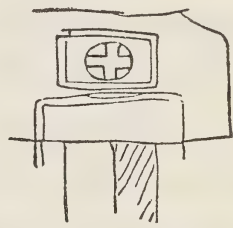
along the whole length and depth of the face of the stone. Unfortunately the stones of the Abernethy Tower are so much disintegrated that, if any such marks ever existed, they are not now to be found. They have not been noticed in the Pillar Towers of Ireland. (*Archæologia*, v. 34. p. 33.) At the time the adjoining church was built, two bells were placed in the Tower; but the situation was found inconvenient, and they were removed.



P. T. Antrim.



Donnaghmore.



Old Church Fore.

The simple cross over the door of the Antrim Pillar Tower proves its Christian origin, and resembles that over the Church of St. Fechen at Fore; this saint died in A. D. 664. The crucifixion over the Donnaghmore and Brechin doorways proves that they were built at a more modern period.

We can suppose that the watcher on the Tower, on the approach of danger, could collect his friends by the horn, drum, or cymbals; and priests, in more peaceable times, could exhibit their relics, and instruct their followers, from the elevated doorway. These suppositions serve to explain the number of the Towers in unsettled countries, and among a turbulent race of people.

To the third variety of Pillar Towers belong Tunahoe, Queen's County; Seven Churches, Smaller Tower Norsida; Kildare, Kildare; Antrim, Antrim; Donnaghmore, Meath; and Brechin, Scotland.

Such are the three classes in which the Irish Pillar Towers may be arranged. The first or original form was most probably erected by Eastern Missionaries, chiefly for religious purposes; and the other two classes were modifications introduced in the course of time, as the buildings were more required as places of defence. As such, they were probably used both before, and after the Buddhist Eastern religion had ceased in the country in which it was first propagated, as they afforded the simplest, and most effectual means of protection; and this explains

their number among turbulent races, as compared with those in more peaceful countries; the few in Scotland compared with the number among the warlike inhabitants of ancient Ireland. They long retained their sacred character, and while used for religious ceremonies, they were found most useful as places of security and defence. There the Priests deposited their most precious effects, as the monks of the present day preserve their books, records, and other valuables in their inaccessible monasteries in Egypt and Syria; on the approach of danger they carry their shrines of gold and silver, and holy relics, into their Towers of safety.

Round Towers which have no connection with religion are found in many countries. In Egypt, where the inhabitants are subject to the depredations of robbers, they resort to such Towers. That



Fig. 1.



Fig. 2.



Fig. 3.

delineated in the margin (Fig. 1) still exists where shepherds hold watch, and in it they deposit all their most valuable goods, with their women and children.* When they have drawn up their rope-ladder they can annoy their enemies with great effect. In border countries where the people were turbulent and warlike, round towers often exist in considerable numbers as the most useful and strongest places of refuge. A good many of them are found on the ghauts, in Hindustan; on the road between Arcot and Bangalore; and skirting the Mysore country. They are from 50 to 60 feet in height, with a door 12 or 15 feet from the ground, reached by means of a ladder: this was drawn up and the door secured. These Towers are often of considerable size, the lower part being used for harbouring cattle. Where the doors are closed, the garrison could easily defend

* *L'Egypte Etat modern*, quoted by Dr. Kitto.

themselves from their enemies armed with bows and arrows, and the like. In the "*Histoire des découvertes dans la Russie et la Perse*," there is an account of many round towers, "said by the inhabitants to be the work of very remote times." At Bulgari there is a round Tower called *Misger*,* according to Pallas. In the midst of the ruins of *Kasimof*, on the *Oha*, which falls into the *Volga*, is a round and elevated Tower called in the language of the country *Misquir*.† In the *Kisti* and *Ingushti*, very ancient nations of the Caucasus, most of the villages have round towers.‡

In Rajputana there were numerous round insulated Towers, thirty or forty feet in height, built on commanding eminences,



whence could be descried the approach of enemies from a distance, and from which the garrison were enabled to alarm the country. The only entrance to these Towers was by a small doorway 12 or 15 feet from the ground. This was reached by means of a ladder, which was pulled up in times of danger, and the door closed, and secured; thus out of danger, a few could repel a great many. The enemies most dreaded were Pindaree horsemen; and the Towers afforded a ready and secure retreat to the husbandmen, who could use their matchlocks with great

effect from the loop-holes with which the tower was pierced. Even when the door was reached and driven in, the defenders had the different stages to retire to, which thus became so many successive fortresses. Some of these were flanked with breastwork; and such facility did they afford for refuge, and such encouragement to continual warfare, that many of them were destroyed by order of the English Government.§

The late Colonel Stacy met with a characteristic example of the use to which these Towers were often put, in his advance on Cabul from Candahar;—"near the camp, within one hundred yards of the road, on the slope of a hill, there was a small but high Tower, with only one

* A corruption of Muzgi, مزگي which signifies 'to make a holy fire burn bright.' Richardson.

† Guttorn.

‡ Ib. p. 145, referred to by Dr. Petric, p. 29.

§ Cap. Western, B. E. told me he had blown up some thirty or forty, to the great benefit of the inhabitants, as they were no longer required, and they had become harbouring places for robbers.